NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: James Rhodes

Rhodes Ranch Country Club 2252 Angels Trace Court Las Vegas, Nevada 89148

for the

Location: Rhodes Ranch Country Club Golf Course

20 Rhodes Ranch Parkway Las Vegas, Nevada 89148

Latitude: 36° 02' 33"N; Longitude: 115° 17' 23'W Section 8, T.22 South, R.60 East MDB&M

Clark County, Nevada

Permit Number: NEV2004500

General: The Rhodes Ranch Country Club Golf Course will receive tertiary treated nitrified disinfected effluent for reuse irrigation supplied by the Desert Breeze Water Resource Center (DBWRC #NEV2002509) of the Clark County Water Reclamation District (CCWRD). The reclaimed water will be used for spray irrigation of the 130 acres of turf grasses on the fairways and roughs, including drip irrigation on landscape trees and shrubs scattered throughout the golf course. Tees and greens are irrigated on a separate potable water line system, isolated from the reclaim water system. The course has been retrofitted for reuse irrigation. The DBWRC reclaimed (reuse) water will be blended in Lake #16 with potable water provided and managed by the Las Vegas Valley Water District to provide the course with the required volume of water required. The relative percentages of potable and reclaimed water will vary with the seasonal irrigation demand and availability of reuse water. A transfer pump station pumps reuse irrigation water from Lake # 16 to Lake # 11 for additional effluent storage for irrigation. All seven Rhodes Ranch golf course lakes have an ultra violet-ozonation aeration systems installed which provide a minimum of twenty turnovers of each lake in a 24 hour period to maintain lake clarity and water quality when operated.

Receiving Water Characteristics: Groundwater in the vicinity of the course is approximately 300 feet below ground surface with groundwater flow direction to the east-southeast. The deep aquifer meets drinking water standards. Due to the depth to groundwater, monitoring wells at the course will not be required.

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<u>Description of the Location of the Discharge</u>: This golf course has 18 fairways and roughs with trees and shrubs as adjacent course landscaping. The clubhouse is located at 20 Rhodes Ranch Parkway, in Las Vegas, Clark County, Nevada, and is situated near Lake #16. The pump station at Lake # 16 supplies irrigation water to the course irrigation system.

<u>Flow</u>: The permitted 30-day ave. flow is 0.850 MGD, and the max. daily flow is 1.89 MGD

which is the maximum anticipated amount for the hot summer months. Flows are measured at the reclaimed and the potable water metering vaults onsite via eight inch magnetic flow meters. Initially, the blend of reclaimed and potable water will be about 50-50.

<u>Procedures for Public Comment</u>: The Notice of the Division's intent to issue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review-Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a 30 day period following the date of the public notice, by May 3, 2004. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons. The request must be filed within the comment period, and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

<u>Discharge Limitations</u>: As noted in Table I.1 below, the DBWRC will be providing the course with a high quality disinfected reclaim water to the golf course. The Total Coliform requirement is set at 2.2 CFU or MPN/100 ml, 30-day average. Therefore, in accordance with NAC 445A.277, a buffer zone and control of public access are not required.

TABLE I.1: Discharge Limitations

<u>PARAMETERS</u>	EFFLUENT DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow:	0.850 MGD	1.89 MGD	Continuous	Flow meter
Total Coliform:	2.2 CFU or MPN/100 ml	23 CFU or MPN/100 ml	Weekly	Discrete
Total Nitrogen as N: (1)	Monitor and Report mg/L		Monthly	Calculate
Total Kjeldahl Nitrogen as N:	Monitor and Report mg/L		Monthly	Composite
Total Oxidized Nitrogen as N: (Nitrate + Nitrite)	Monitor and Report mg/L		Monthly	Composite
Ammonia as N:	Monitor and Report mg/L		Monthly	Composite
Total Nitrogen lbs/ac/year:	– 220 lbs/ac/year See Part I.B.4.		4th Quarter	Calculate

⁽¹⁾ Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kjeldahl Nitrogen

CFU = Colony Forming Unit; MPN = Most Probable Number

The quality of the effluent used by the Permittee may be reported as calculated values based upon the blend of treated effluent and Las Vegas Valley Water District (LVVWD) water.

Monitoring requirements may be satisfied by data collected by the Desert Breeze Water Resource Center and the LVVWD. Discharge Monitoring Reports are to be submitted by the Permittee. Copies of backup data or water quality calculation summaries are to be maintained at the golf course reuse site.

<u>Schedule of Compliance:</u> The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the

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Administrator may make in approving the Schedule of Compliance.

a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit;

b. The Permittee, or it's designated representative, shall adequately address all comments and concerns relating to the Division's review of the EMP. The Permittee shall not reuse treated effluent prior to having an approved Final EMP per NAC 445A.275; and

c. All compliance deliverables shall be submitted to Mr. Nadir Sous, NDEP-LV, 1771 East Flamingo Road, Suite 121-A, Las Vegas, Nevada 89119.

Rationale for Permit Requirements: Reclaimed water monitoring is required to assess the level of treatment being provided by the DBWRC, to assess the quality of blended water delivered to the course by the LVVWD, to assess the management of recycled water usage, and to protect the local groundwater quality. Total Coliform and nitrogen species are required for monitoring the quality of reclaim water being applied, and for protection of human health and the environment.

<u>Determination</u>: The Division has made the determination to issue the proposed permit for a five-year(5) period.

Prepared by: Icyl C.Mulligan, ES MS

March 2004

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